

## Section 1. Registration Information

### Source Identification

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|                         |   |
|-------------------------|---|
| Facility Name:          | JCI Jones Chemicals, Inc. - Riverview, MI |
| Parent Company #1 Name: |   |
| Parent Company #2 Name: |   |

### Submission and Acceptance

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|   |                                     |
|---|-------------------------------------|
| Submission Type:                            | Re-submission                       |
| Subsequent RMP Submission Reason:           | 5-year update (40 CFR 68.190(b)(1)) |
| Description:                                |                                     |
| Receipt Date:                               | 02-Jun-2014                         |
| Postmark Date:                              | 02-Jun-2014                         |
| Next Due Date:                              | 02-Jun-2019                         |
| Completeness Check Date:                    | 02-Jun-2014                         |
| Complete RMP:                               | Yes                                 |
| De-Registration / Closed Reason:            |                                     |
| De-Registration / Closed Reason Other Text: |                                     |
| De-Registered / Closed Date:                |                                     |
| De-Registered / Closed Effective Date:      |                                     |
| Certification Received:                     | Yes                                 |

### Facility Identification

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|                                |                 |
|--------------------------------|-----------------|
| EPA Facility Identifier:       | 1000 0011 3307  |
| Other EPA Systems Facility ID: | 48192JNSCH18000 |
| Facility Registry System ID:   | 1100 0040 6418  |

### Dun and Bradstreet Numbers (DUNS)

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|                         |         |
|-------------------------|---------|
| Facility DUNS:          | 2216091 |
| Parent Company #1 DUNS: |         |
| Parent Company #2 DUNS: |         |

### Facility Location Address

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|           |                    |
|-----------|--------------------|
| Street 1: | 18000 Payne Avenue |
| Street 2: |                    |
| City:     | Riverview          |
| State:    | MICHIGAN           |
| ZIP:      | 48193              |
| ZIP4:     |                    |
| County:   | WAYNE              |

### Facility Latitude and Longitude

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|                                  |                              |
|----------------------------------|------------------------------|
| Latitude (decimal):              | 42.178281                    |
| Longitude (decimal):             | -083.167858                  |
| Lat/Long Method:                 | Interpolation - Satellite    |
| Lat/Long Description:            | Center of Facility           |
| Horizontal Accuracy Measure:     | 150                          |
| Horizontal Reference Datum Name: | North American Datum of 1983 |
| Source Map Scale Number:         |                              |

## Owner or Operator

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|                 |                           |
|-----------------|---------------------------|
| Operator Name:  | JCI Jones Chemicals, Inc. |
| Operator Phone: | (734) 283-0677            |

## Mailing Address

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|                                     |                    |
|-------------------------------------|--------------------|
| Operator Street 1:                  | 18000 Payne Avenue |
| Operator Street 2:                  |                    |
| Operator City:                      | Riverview          |
| Operator State:                     | MICHIGAN           |
| Operator ZIP:                       | 48193              |
| Operator ZIP4:                      |                    |
| Operator Foreign State or Province: |                    |
| Operator Foreign ZIP:               |                    |
| Operator Foreign Country:           |                    |

## Name and title of person or position responsible for Part 68 (RMP) Implementation

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|                                  |                         |
|----------------------------------|-------------------------|
| RMP Name of Person:              | Donald Skidmore, Jr.    |
| RMP Title of Person or Position: | Branch Manager          |
| RMP E-mail Address:              | dskidmorejr@jcichem.com |

## Emergency Contact

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|                                   |                     |
|-----------------------------------|---------------------|
| Emergency Contact Name:           | Timothy Venier      |
| Emergency Contact Title:          | Plant Manager       |
| Emergency Contact Phone:          | (734) 283-0677      |
| Emergency Contact 24-Hour Phone:  | (734) 231-9487      |
| Emergency Contact Ext. or PIN:    |                     |
| Emergency Contact E-mail Address: | tvenier@jcichem.com |

## Other Points of Contact

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|  |                         |
|--|-------------------------|
| Facility or Parent Company E-mail Address:       | dskidmorejr@jcichem.com |
| Facility Public Contact Phone:                   | (734) 283-0677          |
| Facility or Parent Company WWW Homepage Address: | www.jcichem.com         |

## Local Emergency Planning Committee

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|       |                   |
|-------|-------------------|
| LEPC: | Wayne County LEPC |
|-------|-------------------|

## Full Time Equivalent Employees

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|  |    |
|--|----|
| Number of Full Time Employees (FTE) on Site: | 15 |
| FTE Claimed as CBI:                          |    |

## Covered By

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|              |     |
|--------------|-----|
| OSHA PSM :   | Yes |
| EPCRA 302 :  | Yes |
| CAA Title V: |     |

Air Operating Permit ID:

## OSHA Ranking

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OSHA Star or Merit Ranking:

## Last Safety Inspection

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|   |               |
|---|---------------|
| Last Safety Inspection (By an External Agency) Date:    | 13-Jun-2012   |
| Last Safety Inspection Performed By an External Agency: | Michigan OSHA |

## Predictive Filing

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Did this RMP involve predictive filing?:

## Preparer Information

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Preparer Name:  
Preparer Phone:  
Preparer Street 1:  
Preparer Street 2:  
Preparer City:  
Preparer State:  
Preparer ZIP:  
Preparer ZIP4:  
Preparer Foreign State:  
Preparer Foreign Country:  
Preparer Foreign ZIP:

## Confidential Business Information (CBI)

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CBI Claimed:  
Substantiation Provided:  
Unsanitized RMP Provided:

## Reportable Accidents

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|                       |   |
|-----------------------|---|
| Reportable Accidents: | See Section 6. Accident History below to determine if there were any accidents reported for this RMP. |
|-----------------------|---|

## Process Chemicals

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|                      |                            |
|----------------------|----------------------------|
| Process ID:          | 1000052172                 |
| Description:         |                            |
| Process Chemical ID: | 1000063248                 |
| Program Level:       | Program Level 3 process    |
| Chemical Name:       | Sulfur dioxide (anhydrous) |
| CAS Number:          | 7446-09-5                  |
| Quantity (lbs):      | 33000                      |
| CBI Claimed:         |                            |
| Flammable/Toxic:     | Toxic                      |

|                      |                         |
|----------------------|-------------------------|
| Process ID:          | 1000052171              |
| Description:         |                         |
| Process Chemical ID: | 1000063247              |
| Program Level:       | Program Level 3 process |
| Chemical Name:       | Chlorine                |
| CAS Number:          | 7782-50-5               |
| Quantity (lbs):      | 720000                  |
| CBI Claimed:         |                         |
| Flammable/Toxic:     | Toxic                   |

## Process NAICS

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|                    |   |
|--------------------|---|
| Process ID:        | 1000052171  |
| Process NAICS ID:  | 1000052797  |
| Program Level:     | Program Level 3 process                                 |
| NAICS Code:        | 42469   |
| NAICS Description: | Other Chemical and Allied Products Merchant Wholesalers |

|                    |   |
|--------------------|---|
| Process ID:        | 1000052172  |
| Process NAICS ID:  | 1000052798  |
| Program Level:     | Program Level 3 process                                 |
| NAICS Code:        | 42469   |
| NAICS Description: | Other Chemical and Allied Products Merchant Wholesalers |

## Section 2. Toxics: Worst Case

Toxic Worst ID: 1000042548

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|                              |                           |
|------------------------------|---------------------------|
| Percent Weight:              |                           |
| Physical State:              | Gas liquified by pressure |
| Model Used:                  | EPA's RMP*Comp(TM)        |
| Release Duration (mins):     | 10                        |
| Wind Speed (m/sec):          | 1.5                       |
| Atmospheric Stability Class: | F                         |
| Topography:                  | Urban                     |

### Passive Mitigation Considered

|             |      |
|-------------|------|
| Dikes:      |      |
| Enclosures: |      |
| Berms:      |      |
| Drains:     |      |
| Sumps:      |      |
| Other Type: | None |

## Section 3. Toxics: Alternative Release

### Toxic Alter ID: 1000045167

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|                              |                           |
|------------------------------|---------------------------|
| Percent Weight:              |                           |
| Physical State:              | Gas liquified by pressure |
| Model Used:                  | EPA's RMP*Comp(TM)        |
| Wind Speed (m/sec):          | 3.0                       |
| Atmospheric Stability Class: | D                         |
| Topography:                  | Urban                     |

#### Passive Mitigation Considered

|             |      |
|-------------|------|
| Dikes:      |      |
| Enclosures: |      |
| Berms:      |      |
| Drains:     |      |
| Sumps:      |      |
| Other Type: | None |

#### Active Mitigation Considered

|                     |  |
|---------------------|--|
| Sprinkler System:   |  |
| Deluge System:      |  |
| Water Curtain:      |  |
| Neutralization:     |  |
| Excess Flow Valve:  |  |
| Flares:             |  |
| Scrubbers:          |  |
| Emergency Shutdown: | Yes  |
| Other Type:         | Gas detection sensors, emergency shutoff system, railcar valve closure system. |

### Toxic Alter ID: 1000045168

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|                              |                           |
|------------------------------|---------------------------|
| Percent Weight:              |                           |
| Physical State:              | Gas liquified by pressure |
| Model Used:                  | EPA's RMP*Comp(TM)        |
| Wind Speed (m/sec):          | 3.0                       |
| Atmospheric Stability Class: | D                         |
| Topography:                  | Urban                     |

#### Passive Mitigation Considered

|             |      |
|-------------|------|
| Dikes:      |      |
| Enclosures: |      |
| Berms:      |      |
| Drains:     |      |
| Sumps:      |      |
| Other Type: | None |

#### Active Mitigation Considered

|                    |  |
|--------------------|--|
| Sprinkler System:  |  |
| Deluge System:     |  |
| Water Curtain:     |  |
| Neutralization:    |  |
| Excess Flow Valve: |  |
| Flares:            |  |
| Scrubbers:         |  |

Emergency Shutdown:

Other Type:

Gas detection sensors.

## **Section 4. Flammables: Worst Case**

No records found.



## **Section 5. Flammables: Alternative Release**

No records found.

## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

The prevention programs described in the facility's Safety, Safety Training, Process Hazard Analysis (PHA), and Mechanical Integrity manuals represent integrated administrative controls intended to provide for the safety of workers, the public, and the environment. Many of these prevention programs; i.e., PHAs, compliance audits, equipment inspections, and incident investigations have resulted in the development and implementation of additional safeguards (administrative and engineering controls). Control systems designed to maintain operating parameters (temperature, pressures, flow, and level) within allowable limits are built into the facility's covered processes and are inspected weekly and or in accordance with manufacturers recommendations. The covered processes are also equipped with alarms designed to alert personnel when the operating parameters exceed the allowable limits. The facility has developed procedures and conducted training of personnel to familiarize them with the consequences of exceeding allowable limits (safety and operability) and the proper procedures to be followed in responding to all to alarms. Safeguards to prevent, detect, or control accidental releases of regulated substances are described in the facility's Safety, Safety Training Manuals, and Mechanical Integrity manuals and are inspected on a regular basis.

In addition, the facility has a comprehensive Security Plan designed to minimize if not prevent the potential impact on JCI personnel, facilities, equipment, processes and products as a result of unlawful acts either made or attempted by individuals seeking to harm personnel, property and or the environment.

### Program Level 3 Prevention Program Chemicals

|                                 |            |
|---------------------------------|------------|
| Prevention Program Chemical ID: | 1000052924 |
| Chemical Name:                  | Chlorine   |
| Flammable/Toxic:                | Toxic      |
| CAS Number:                     | 7782-50-5  |
| Process ID:                     | 1000052171 |
| Description:                    |            |
| Prevention Program Level 3 ID:  | 1000044093 |
| NAICS Code:                     | 42469      |

### Safety Information

|   |             |
|---|-------------|
| Safety Review Date (The date on which the safety information was last reviewed or revised): | 02-Apr-2014 |
|---|-------------|

### Process Hazard Analysis (PHA)

|   |             |
|---|-------------|
| PHA Completion Date (Date of last PHA or PHA update): | 02-Apr-2014 |
|---|-------------|

### The Technique Used

|                                    |     |
|------------------------------------|-----|
| What If:                           | Yes |
| Checklist:                         |     |
| What If/Checklist:                 |     |
| HAZOP:                             |     |
| Failure Mode and Effects Analysis: |     |
| Fault Tree Analysis:               |     |
| Other Technique Used:              |     |

PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):

04-Apr-2014

## Major Hazards Identified

---

|  |     |
|--|-----|
| Toxic Release:   | Yes |
| Fire:  | Yes |
| Explosion:   | Yes |
| Runaway Reaction:                                      |     |
| Polymerization:  |     |
| Overpressurization:                                    | Yes |
| Corrosion:   | Yes |
| Overfilling:   | Yes |
| Contamination:   |     |
| Equipment Failure:                                     | Yes |
| Loss of Cooling, Heating, Electricity, Instrument Air: | Yes |
| Earthquake:  |     |
| Floods (Flood Plain):                                  |     |
| Tornado:   |     |
| Hurricanes:  |     |
| Other Major Hazard Identified:                         |     |

## Process Controls in Use

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|                               |     |
|-------------------------------|-----|
| Vents:                        | Yes |
| Relief Valves:                | Yes |
| Check Valves:                 | Yes |
| Scrubbers:                    |     |
| Flares:                       |     |
| Manual Shutoffs:              | Yes |
| Automatic Shutoffs:           | Yes |
| Interlocks:                   |     |
| Alarms and Procedures:        | Yes |
| Keyed Bypass:                 |     |
| Emergency Air Supply:         | Yes |
| Emergency Power:              |     |
| Backup Pump:                  |     |
| Grounding Equipment:          |     |
| Inhibitor Addition:           |     |
| Rupture Disks:                | Yes |
| Excess Flow Device:           | Yes |
| Quench System:                |     |
| Purge System:                 |     |
| None:                         |     |
| Other Process Control in Use: |     |

## Mitigation Systems in Use

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|                   |  |
|-------------------|--|
| Sprinkler System: |  |
| Dikes:            |  |
| Fire Walls:       |  |
| Blast Walls:      |  |
| Deluge System:    |  |
| Water Curtain:    |  |
| Enclosure:        |  |

Neutralization:

None:

Other Mitigation System in Use:

Gas sensors, emergency shutoffs, railcar valve closure system.

## Monitoring/Detection Systems in Use

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Process Area Detectors:

Yes

Perimeter Monitors:

None:

Other Monitoring/Detection System in Use:

Storage area detectors.

## Changes Since Last PHA Update

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Reduction in Chemical Inventory:

Increase in Chemical Inventory:

Yes

Change Process Parameters:

Installation of Process Controls:

Installation of Process Detection Systems:

Installation of Perimeter Monitoring Systems:

Installation of Mitigation Systems:

None Recommended:

Yes

None:

Other Changes Since Last PHA or PHA Update:

## Review of Operating Procedures

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Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):

18-Mar-2014

## Training

---

Training Revision Date (The date of the most recent review or revision of training programs):

14-Jan-2014

## The Type of Training Provided

---

Classroom:

Yes

On the Job:

Yes

Other Training:

Job specific performance evaluations and emergency response drills.

## The Type of Competency Testing Used

---

Written Tests:

Yes

Oral Tests:

Demonstration:

Yes

Observation:

Yes

Other Type of Competency Testing Used:

## Maintenance

---

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):

18-Apr-2013

Equipment Inspection Date (The date of the most recent equipment inspection or test): 30-Apr-2014

Equipment Tested (Equipment most recently inspected or tested): All valves (both actuated & manual), whips, transfer hoses, gauges, electric motors, pumps, tanks, heat exchangers, expansion chambers, etc. in accordance with JCI's Mechanical Integrity Program.

## Management of Change

---

Change Management Date (The date of the most recent change that triggered management of change procedures): 14-Jan-2009

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 18-Jan-2014

## Pre-Startup Review

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Pre-Startup Review Date (The date of the most recent pre-startup review): 14-Jan-2009

## Compliance Audits

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Compliance Audit Date (The date of the most recent compliance audit): 18-Jan-2014

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 18-Jan-2014

## Incident Investigation

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Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

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Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 18-Jan-2014

## Hot Work Permit Procedures

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Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 18-Jan-2014

## Contractor Safety Procedures

---

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 18-Jan-2014

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):

### Confidential Business Information

---

CBI Claimed:

## Description

The prevention programs described in the facility's Safety, Engineering, and Safety Training Manuals represent integrated administrative controls intended to ensure the safety of workers, the public, and the environment. Many of these prevention programs; i.e., PHAs, compliance audits, and incident investigations, result in the development and implementation of additional safeguards (administrative and engineering controls). All covered processes have control systems designed to maintain operating parameters (temperature, pressures, flow, and level) within allowable limits. The covered processes are also equipped with alarms to alert personnel when the operating parameters exceed the allowable limits. The facility developed procedures and conducted training of personnel to familiarize them with the consequences of exceeding allowable limits (safety and operability) to ensure the correct response to the alarms. Safeguards to prevent, detect, or mitigate accidental releases of regulated substances are described in the facility's Safety, Engineering, and Safety Training Manuals.

In addition, the facility has a comprehensive Security Plan designed to minimize the potential impact on JCI personnel, facilities, equipment, processes and products as a result of unlawful acts either made or attempted by individuals seeking to harm personnel, property and or the environment.

## Program Level 3 Prevention Program Chemicals

|                                 |                            |
|---------------------------------|----------------------------|
| Prevention Program Chemical ID: | 1000052925                 |
| Chemical Name:                  | Sulfur dioxide (anhydrous) |
| Flammable/Toxic:                | Toxic                      |
| CAS Number:                     | 7446-09-5                  |

|                                |            |
|--------------------------------|------------|
| Process ID:                    | 1000052172 |
| Description:                   |            |
| Prevention Program Level 3 ID: | 1000044094 |
| NAICS Code:                    | 42469      |

## Safety Information

|   |             |
|---|-------------|
| Safety Review Date (The date on which the safety information was last reviewed or revised): | 02-Apr-2014 |
|---|-------------|

## Process Hazard Analysis (PHA)

|   |             |
|---|-------------|
| PHA Completion Date (Date of last PHA or PHA update): | 02-Apr-2014 |
|---|-------------|

## The Technique Used

|  |             |
|--|-------------|
| What If:   | Yes         |
| Checklist:   |             |
| What If/Checklist:   |             |
| HAZOP:   |             |
| Failure Mode and Effects Analysis:   |             |
| Fault Tree Analysis:   |             |
| Other Technique Used:  |             |
| PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update): | 04-Apr-2014 |



## Major Hazards Identified

---

|  |     |
|--|-----|
| Toxic Release:   | Yes |
| Fire:  | Yes |
| Explosion:   |     |
| Runaway Reaction:                                      |     |
| Polymerization:  |     |
| Overpressurization:                                    | Yes |
| Corrosion:   | Yes |
| Overfilling:   | Yes |
| Contamination:   |     |
| Equipment Failure:                                     | Yes |
| Loss of Cooling, Heating, Electricity, Instrument Air: | Yes |
| Earthquake:  |     |
| Floods (Flood Plain):                                  |     |
| Tornado:   |     |
| Hurricanes:  |     |
| Other Major Hazard Identified:                         |     |

## Process Controls in Use

---

|                               |     |
|-------------------------------|-----|
| Vents:                        | Yes |
| Relief Valves:                | Yes |
| Check Valves:                 | Yes |
| Scrubbers:                    |     |
| Flares:                       |     |
| Manual Shutoffs:              | Yes |
| Automatic Shutoffs:           | Yes |
| Interlocks:                   |     |
| Alarms and Procedures:        | Yes |
| Keyed Bypass:                 |     |
| Emergency Air Supply:         | Yes |
| Emergency Power:              |     |
| Backup Pump:                  |     |
| Grounding Equipment:          |     |
| Inhibitor Addition:           |     |
| Rupture Disks:                | Yes |
| Excess Flow Device:           | Yes |
| Quench System:                |     |
| Purge System:                 |     |
| None:                         |     |
| Other Process Control in Use: |     |

## Mitigation Systems in Use

---

|                                 |  |
|---------------------------------|--|
| Sprinkler System:               |  |
| Dikes:                          |  |
| Fire Walls:                     |  |
| Blast Walls:                    |  |
| Deluge System:                  |  |
| Water Curtain:                  |  |
| Enclosure:                      |  |
| Neutralization:                 |  |
| None:                           |  |
| Other Mitigation System in Use: | Gas sensors, emergency shutoffs, railcar valve closure system. |

## Monitoring/Detection Systems in Use

---

|   |                         |
|---|-------------------------|
| Process Area Detectors:                   | Yes                     |
| Perimeter Monitors:                       |                         |
| None:                                     |                         |
| Other Monitoring/Detection System in Use: | Storage area detectors. |

## Changes Since Last PHA Update

---

|   |     |
|---|-----|
| Reduction in Chemical Inventory:              |     |
| Increase in Chemical Inventory:               | Yes |
| Change Process Parameters:                    |     |
| Installation of Process Controls:             |     |
| Installation of Process Detection Systems:    |     |
| Installation of Perimeter Monitoring Systems: |     |
| Installation of Mitigation Systems:           |     |
| None Recommended:                             | Yes |
| None:   |     |
| Other Changes Since Last PHA or PHA Update:   |     |

## Review of Operating Procedures

---

|  |             |
|--|-------------|
| Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): | 18-Mar-2014 |
|--|-------------|

## Training

---

|   |             |
|---|-------------|
| Training Revision Date (The date of the most recent review or revision of training programs): | 14-Jan-2014 |
|---|-------------|

## The Type of Training Provided

---

|                 |   |
|-----------------|---|
| Classroom:      | Yes   |
| On the Job:     | Yes   |
| Other Training: | Job specific performance evaluations and emergency response drills. |

## The Type of Competency Testing Used

---

|  |     |
|--|-----|
| Written Tests:                         | Yes |
| Oral Tests:                            |     |
| Demonstration:                         | Yes |
| Observation:                           | Yes |
| Other Type of Competency Testing Used: |     |

## Maintenance

---

|  |             |
|--|-------------|
| Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): | 18-Apr-2013 |
|--|-------------|

|   |             |
|---|-------------|
| Equipment Inspection Date (The date of the most recent equipment inspection or test): | 30-Apr-2014 |
|---|-------------|

Equipment Tested (Equipment most recently inspected or tested):

All valves (both actuated and manual), whips, transfer hoses, gauges, electric motors, pumps, tanks, heat exchangers, expansion chambers, etc. in accordance with JCI's Mechanical Integrity Program.

## Management of Change

---

Change Management Date (The date of the most recent change that triggered management of change procedures): 14-Jan-2009

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 18-Jan-2014

## Pre-Startup Review

---

Pre-Startup Review Date (The date of the most recent pre-startup review): 14-Jan-2009

## Compliance Audits

---

Compliance Audit Date (The date of the most recent compliance audit): 18-Jan-2014

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 18-Jan-2014

## Incident Investigation

---

Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

---

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 18-Jan-2014

## Hot Work Permit Procedures

---

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 18-Jan-2014

## Contractor Safety Procedures

---

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 18-Jan-2014

Contractor Safety Performance Evaluation Date  
(The date of the most recent review or revision of  
contractor safety performance):

## Confidential Business Information

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CBI Claimed:

## Section 8. Program Level 2

No records found.

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

### Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 06-May-2014

### Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 29-Apr-2014

### Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Wayne County LEPC

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (734) 942-5289

### Subject to

OSHA Regulations at 29 CFR 1910.38:  
 OSHA Regulations at 29 CFR 1910.120: Yes  
 Clean Water Regulations at 40 CFR 112:  
 RCRA Regulations at CFR 264, 265, and 279.52:  
 OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:  
 State EPCRA Rules or Laws: Yes  
 Other (Specify):

## Executive Summary

### EXECUTIVE SUMMARY

JCI JONES CHEMICALS, INC.

RIVERVIEW, MICHIGAN

#### 1. Accidental Release Prevention and Emergency Response Policies

JCI is committed to being a responsible member of any community in which it has operations by giving top priority to operating in a safe and environmentally sound manner. As part of this commitment, JCI has obtained Responsible Care® Management System certification. Corporate policy dictates that facilities continuously identify methods to provide the safest working environment possible to its employees and to reduce the risk to the community and environment. This commitment to safe and environmentally sound operations is documented in the corporate policy and compliance/procedure manuals, which are available to all employees. This facility stresses safe and environmentally sound operations in employee training programs, and in written materials available at the facility. This facility's safety and environmental programs include monthly safety meetings of all employees. JCI has an environmental manual and a safety manual that cover general environmental and safety best practices and compliance topics. Each employee at this facility has access to the environmental and safety manuals that cover topics specific to this facility. There are regularly scheduled safety and environmental audits conducted by facility management, and periodic safety and environmental audits of the facility conducted by JCI corporate personnel. This risk management program document has been prepared to meet the requirements of the U.S. Environmental Protection Agency's Risk Management Program regulations as stated in 40 CFR Part 68 (Appendix A).

#### 2. The JCI Facility and the Regulated Substances Handled

The primary function of this facility is to protect public health by supplying chemicals including chlorine and sodium hypochlorite to disinfect bulk water systems. The primary operations conducted at this facility include the distribution of inorganic chemicals and repackaging of inorganic gases. Chemicals are brought on site in bulk quantities (railcars, tank trucks, etc.), repackaged into smaller containers, and then transported to customers on an as-needed basis. Any residual compressed gas is absorbed in an appropriate solution and sold as product. The regulated substances handled by this facility are chlorine and sulfur dioxide.

#### 3. The General Accidental Release Prevention Program and Chemical-Specific Prevention Steps

The prevention programs described in this facility's Safety and Safety Training Manuals represent integrated administrative controls intended to ensure the safety of workers, the public, and the environment. Many of these prevention programs (e.g., PHAs, compliance audits, incident investigations) result in the development and implementation of additional safeguards (administrative and engineering controls). All covered processes have control systems designed to maintain operating parameters (temperature, pressures, flow, and level) within allowable limits. The covered processes are also equipped with alarms to alert personnel when the operating parameters exceed the allowable limits. This facility developed procedures and conducted training of personnel to familiarize them with the consequences of exceeding allowable limits (safety and operability) to ensure the correct response to the alarms. Safeguards to prevent, detect, or mitigate accidental releases of regulated substances are described in the facility's Safety and Safety Training Manuals.

#### 4. The Five-Year Accident History

This facility compiled a five-year accident history (June 1, 2009 - May 31, 2014) for all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known off-site deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage as required by the RMP regulations. The five-year accident history allows the facility to explain to the community the factors causing or contributing to accidental releases, the on-site and off-site impacts of accidental releases, and the procedural and technological changes made to minimize the likelihood that these accidental releases will ever occur again. The intent of this information exchange is to create an informed community, while also documenting that accidental releases are investigated and concrete changes are made to protect against recurrence.

Personnel at the facility reviewed all incident investigation reports from June 1, 2009 to May 31, 2014 to identify accidental releases of extremely hazardous substances that resulted in deaths, injuries, or significant property damage on site, or known off-site deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. No accidental releases were identified.

## 5. The Emergency Response Plan

Overall safety at this facility is governed not only by the ability to prevent accidental releases of regulated substances, but also by the ability to mitigate any accidental releases. This facility therefore developed an emergency response program to minimize the effects of accidental releases of regulated substances on employees, the public, and the environment. The facility has a trained emergency response team (ERT), appropriate equipment and supplies, and a detailed Contingency Plan. The Contingency Plan outlines the procedures to be taken in the event of an accidental release of a regulated substance and specifies notification, evacuation, and release control and containment measures for accidental releases that may occur at the facility or on the highway (in transportation accidents).

The Contingency Plan Manual includes specific process information, a list of emergency equipment, emergency evacuation plans, and a list of plant personnel. The manual also includes a list of telephone numbers of agencies and individuals to contact in the event that one of several pre-identified emergencies (e.g., fire, employee injury, employee fatality). The agencies and individuals represent local emergency responders (e.g., fire department), public notification and regulatory reporting requirements (e.g., EPA), and internal notification (e.g., Branch Manager, Corporate Headquarters). Written coordination agreements that document arrangements with local emergency responders are maintained in the Contingency Plan Manual.

The Contingency Plan includes plans to respond to releases of regulated substances, and identifies the ERT training requirements, qualifications, and responsibilities within the incident command system. The ERT comprises individuals from operations, maintenance, and engineering. In addition to the ERT, this facility has identified, properly trained, and properly equipped employees to administer first aid until the outside responders arrive. All ERT members complete on-site annual eight-hour refresher training.

The Contingency Plan includes the chemical-specific emergency response procedures for releases of regulated and other extremely hazardous substances. The procedures identify the individuals by training level that perform the actions, administrative and engineering controls (e.g., ventilation), the required PPE, first aid requirements, and required equipment.

This facility maintains emergency response equipment and PPE for use by the ERT and the fire department. The emergency response equipment is included in the mechanical integrity program, assuring that required testing and inspection frequencies are adhered to and preventive maintenance activities are conducted. Examples of PPE maintained at this facility include air-purifying respirators and self contained breathing apparatuses.

The Contingency Plan is reviewed monthly to ensure that it remains accurate and current. Employees are trained in the emergency response program when initially hired, when the emergency response plan is revised, and when employees' responsibilities are changed. All employees receive annual refresher training on the emergency response program.

The Contingency Plan and documentation of emergency response activities are maintained in the facility's Contingency Plan Manual.

## 6. Planned Changes to Improve Safety

Studies associated with prevention program elements such as PHAs, incident investigations, management of change, and compliance audits are regularly conducted at this facility to verify designs and to identify potential hazards. Recommendations may be developed as a result of those studies and as a result of equipment inspections, safety meetings, review of industry experience, technology improvements, and employee suggestions. Once formulated, recommendations are reviewed and corresponding action items are developed to implement each recommendation.

JCI facility personnel reviewed the following documents to identify all action items that were formulated to reduce the risk (severity or likelihood) of an incident that could have plausibly resulted in an off-site consequence (i.e., the emergency response planning guideline level 2 [ERPG-2] developed by the American Industrial Hygiene Association for toxic gases):

- Accident Investigation Reports
- Process Hazard Analysis
- Standard Operating Procedures



In addition to the extensive safety and security mitigation systems that JCI currently has at its facility, JCI is currently planning on installing an intrusion detection system at this facility to provide continuous monitoring of its regulated substances. This system will include electrical monitoring of door contacts along with motion detector activated video cameras that will be monitored by a third-party company.

#### 7. Worst Case and Alternative Case Release Scenarios

Worst Case Release Scenario: Entire contents of 180,000 pound railcar of Chlorine.

Alternative Case Release Scenario: A chlorine container begins leaking at the filling station at any time during the repackaging process, to include immediately before or after the connection or disconnection process, for any reason to include employee error.

Alternative Case Release Scenario: A valve on a sulfur dioxide container begins leaking while the container is in storage.